

December 5, 2011

MEMORANDUM TO: Michael Case, Director  
Division of Engineering  
Office of Nuclear Regulatory  
Research

FROM: John D. Kinneman, Director **/RA/**  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: WITHDRAWAL OF REGULATORY GUIDE 5.67

The Division of Fuel Cycle Safety and Safeguards requests support to withdraw Regulatory Guide (RG) 5.67, "Material Control and Accounting for Uranium Enrichment Facilities Authorized to Produce Special Nuclear Material of Low Strategic Significance," dated December 1993. The responses to the questions from the Advisory Committee on Reactor Safeguards regarding RG withdrawal are attached.

Enclosure:  
As stated

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301-492-3426

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**ACRS Questions for Withdrawal of Regulatory Guide 5.67,  
“Material Control and Accounting for Uranium Enrichment Facilities Authorized to  
Produce Special Nuclear Material of Low Strategic Significance”**

**(1) What did the Regulatory Guide support?**

Regulatory Guide (RG) 5.67, “Material Control and Accounting for Uranium Enrichment Facilities Authorized to Produce Special Nuclear Material of Low Strategic Significance,” was originally issued in December 1993 to provide guidance to the Paducah and Portsmouth Gaseous Diffusion Plants (GDPs) to develop their material control and accounting (MC&A) programs.

**(2) What was the purpose of the Regulatory Guide?** (Discuss the why the regulatory guide was originally developed.)

RG 5.67 was developed to provide guidance on MC&A practices for uranium enrichment facilities. This effort was undertaken to support the certification of GDPs.

**(3) How was the Regulatory Guide used?**

The RG was used in conjunction with the guidance NUREG/CR-5734, “Recommendations to the NRC on Acceptable Standard Format and Content for the Fundamental Nuclear Material Control (FNMC) Plan Required for Low-Enriched Uranium Facilities,” to develop the Fundamental Nuclear Material Control Plan (FNMCP) for both GDPs.

**(4) Why is the Regulatory Guide no longer needed?** (Reference any document that supersedes the regulatory guide.)

NUREG/CR-5734 provides more extensive guidance on meeting the requirements for MC&A for enrichment facilities. Several licensees and applicants have used this NUREG to develop MC&A programs and FNMCPs. This NUREG is far more comprehensive and detailed than RG 5.67. Additionally, individual subjects that were only briefly covered in RG 5.67 are covered in detail in 28 MC&A RGs specific to those topics. The lack of detailed guidelines in many MC&A program elements in RG 5.67 creates an unintended inconsistency in regulatory guidelines. NUREG/CR-5734 and the topical MC&A RGs provide the level of detail necessary for licensees to meet regulatory requirements.

**(5) What guidance is available once the Regulatory Guide is removed?**

NUREG/CR-5734 and 28 other RGs on MC&A provide detailed and comprehensive guidance for enrichment facilities. All of these guidance documents are being updated and will specifically state that they are acceptable for use at enrichment plants.

- (6) What are the possible “ripple effects” on other documents?** (Identify documents that could be affected by the withdrawal.)

All MC&A RGs and NUREG/CR-5734 are being updated at this time. Any references to RG 5.67 are being removed during this process. No substantial effect on other documents is expected because the other guidance documents contained more detailed technical information and, therefore, do not generally reference RG 5.67.

- (7) What is the basis for believing that no guidance similar to that in the Regulatory Guide will ever be needed?** (Verify that no licensee would be adversely affected by the withdrawal of the regulatory guide.)

NUREG/CR-5734 covers all the topics of RG 5.67 in greater detail. Further information is contained in the 28 MC&A RGs covering individual MC&A topics. Three applications to build and operate enrichment facilities in the U.S. were reviewed recently and none of these applicants used RG 5.67. No existing or future licensees will be adversely affected by the withdrawal of this RG. The original GDP applicants provided comments on the inconsistency and compatibility between NUREG/CR-5734 and RG 5.67.

- (8) Will generic guidance still be needed?**

NUREG/CR-5734 and the other MC&A RGs will meet the needs of current and future licensees.

- (9) What is the rationale for withdrawing this Regulatory Guide instead of revising it?** (Verify that the methods/techniques presented in the guide no longer provide an acceptable approach or does not otherwise provide useful information.)

In order to adequately revise RG 5.67, it would have to incorporate all the information in NUREG/CR-5734 and the 28 MC&A RGs. A revised RG 5.67 would be redundant and not contribute any new information on meeting regulatory requirements that will not be covered by other guidance documents.

- (10) Is the Regulatory Guide referenced in other documents?**

Any references to RG 5.67 are being removed from the other MC&A RGs and NUREGs as part of the on-going update process.

- (11) Do other agencies rely upon the Regulatory Guide, e.g., the Agreement States, National Aeronautical and Space Administration, Department of Energy?**

No.